

BIRCH TEWART, KOLASCH & BIRCH LLP

P.O. Box 747 Falls Church, Virginia 22040-0747
Telephone: (703) 205-8000 Facsimile: (703) 205-8050

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled.

Insert Title: SI-BASED RESONANT INTERBAND TUNNELING DIODES AND METHOD OF MAKING INTERBAND TUNNELING DIODES
Fill in Appropriate Information - For Use Without Specification Attached: the specification of which is attached hereto. If not attached hereto, the specification was filed on May 5, 2000 United States Application Number 09/565,455 as amended on (if applicable) and/or the specification was filed on (if applicable) as PCT International Application Number ; and was amended under PCT Article 19 on (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Table with 4 columns: Prior Foreign Application(s), Priority Claimed, Yes, No. Rows include application numbers, countries, and filing dates.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications(s) listed below.

Table with 2 columns: (Application Number), (Filing Date). Row includes 60/133,067 and May 7, 1999.

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application:

Table with 3 columns: Country, Application Number, Date of Filing (Month/Day/Year).

I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

Table with 3 columns: (Application Number), (Filing Date), (Status - patented, pending, abandoned). Rows include application numbers and filing dates.

Vertical text on the left margin: Insert Prior Information (if appropriate), Insert Provisional Application(s) (if any), Insert Requested Information (if appropriate), Insert Prior U.S. Application(s) (if any).

I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

Raymond C. Stewart	(Reg. No. 21,066)	Terrell C. Birch	(Reg. No. 19,382)
Joseph A. Kolasch	(Reg. No. 22,463)	James M. Slattery	(Reg. No. 28,380)
Bernard L. Sweeney	(Reg. No. 24,448)	Michael K. Mutter	(Reg. No. 29,680)
Charles Gorenstein	(Reg. No. 29,271)	Gerald M. Murphy, Jr.	(Reg. No. 28,977)
Leonard R. Svensson	(Reg. No. 30,330)	Terry L. Clark	(Reg. No. 32,644)
Andrew D. Meikle	(Reg. No. 32,868)	Marc S. Weiner	(Reg. No. 32,181)
Joe McKinney Muncy	(Reg. No. 32,334)	Donald J. Daley	(Reg. No. 34,313)
John W. Bailey	(Reg. No. 32,881)	John A. Castellano	(Reg. No. 35,094)
Gary D. Yacura	(Reg. No. 35,416)		

Send Correspondence to:

BIRCH, STEWART, KOLASCH & BIRCH, LLP or Customer No. 2292
 P.O. Box 747 • Falls Church, Virginia 22040-0747
 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

PLEASE NOTE:
 YOU MUST COMPLETE THE FOLLOWING:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1 Name of First or Sole Inventor
 2 Name of Inventor
 3 Date This Document is Signed
 4 Residence
 5 Citizenship
 6 Post Office Address
 7 Name of Second Inventor, if any
 8 Name of Third Inventor, if any
 9 Name of Fourth Inventor, if any

GIVEN NAME/FAMILY NAME Paul R. Berger		INVENTOR'S SIGNATURE <i>Paul R. Berger</i>	DATE* 7/3/00
Residence (City, State & Country) Newark, DE 19711-2593 U.S.A.		CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country) 17 West Ridge Court, Newark, DE 19711-2593 U.S.A.			
GIVEN NAME/FAMILY NAME Phillip E. Thompson		INVENTOR'S SIGNATURE <i>Phillip E. Thompson</i>	DATE* 7/11/2000
Residence (City, State & Country) Springfield, VA 22153 U.S.A.		CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country) 8316 Kings Ridge Court, Springfield, VA 22153 U.S.A.			
GIVEN NAME/FAMILY NAME Roger Lake		INVENTOR'S SIGNATURE <i>Roger Lake</i>	DATE* 7/19/00
Residence (City, State & Country) Dallas, TX 75214 U.S.A.		CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country) 6712 Bob-o-link Drive, Dallas, TX 75214 U.S.A.			
GIVEN NAME/FAMILY NAME Karl Hobart		INVENTOR'S SIGNATURE <i>Karl Hobart</i>	DATE* July 11, 2000
Residence (City, State & Country) Upper Marlboro, MD 20772 U.S.A.		CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country) 8610 Croom Road, Upper Marlboro, MD 20772 U.S.A.			

*DATE OF SIGNATURE

11 Name of Fifth inventor, if any: see above

11 Name of Sixth inventor, if any: see above

11 Name of Seventh inventor, if any: see above

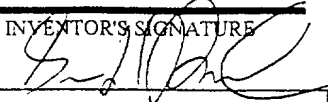
11 Name of Eighth inventor, if any: see above

11 Name of Ninth inventor, if any: see above

11 Name of Tenth inventor, if any: see above

11 Name of Eleventh inventor, if any: see above

11 Name of Twelfth inventor, if any: see above

GIVEN NAME/FAMILY NAME Sean L. Rommel		INVENTOR'S SIGNATURE 	DATE* July 10, 2000
Residence (City, State & Country) Champaign, IL 61821 U.S.A.		CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country) 208 Kenwood Road #327, Champaign, IL 61821 U.S.A.			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
POST OFFICE ADDRESS (Complete Street Address including City, State & Country)			

*DATE OF SIGNATURE